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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/667,168	09/19/2003	Fred C. Porter	6978-254/COA	1627
27572	7590	09/07/2005	EXAMINER	
HARNESS, DICKEY & PIERCE, P.L.C. P.O. BOX 828 BLOOMFIELD HILLS, MI 48303			HO, HA DINH	
			ART UNIT	PAPER NUMBER
			3681	
DATE MAILED: 09/07/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/667,168	PORTER, FRED C.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Ha D. Ho	3681	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 19 August 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-7, 9-14, 16-19, 21-24 and 26-34 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 19, 21-24 and 26-34 is/are allowed.
- 6) ☒ Claim(s) 1-7, 9-11, 14, 16 and 17 is/are rejected.
- 7) ☒ Claim(s) 12, 13 and 18 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |



### DETAILED ACTION

1. This Office Action is responsive to Amendment filed on 8/19/05. Claims 1-7, 9-14, 16-19, 21-24 and 26-34 are currently pending.

#### *Claim Objections*

2. Claim 26 is objected to because of the following informalities:
  - Claim 26, line 2 "rear and rear" should be changed to --front and rear--.Appropriate correction is required.

#### *Claim Rejections - 35 USC § 102*

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-7, 9-11, 14, 16 and 17 are rejected under 35 U.S.C. 102(e) as being anticipated by Bowen et al. (US 6,464,608).

(claim 1) Bowen et al'608 shows a hybrid vehicle comprising:

a primary power source 12;

a rear driveline 46 including a set of rear wheels 42;

a front driveline 36 including a set of front wheels 32

a transfer case 20 having a rear output shaft 50 interconnecting said primary power source to said rear driveline for driving said rear wheels, a front output shaft 40 connected to said front driveline, and an electric motor 22 driving said front output shaft for driving said front wheels; and

a control system (26, 28, 30) for controlling actuation of said electric motor such that an electric operating mode is established (col. 5, lines 28-50 and col. 6. lines 16-22) when said electric motor drives said front output shaft while said rear output shaft is not driven by said primary power source.

(claim 2) wherein said transfer case further includes a reduction gearset 56 having an input 82 driven by said electric motor and an output 88 driving said front output shaft.

(claim 3) wherein said control system is operable to define a hybrid operating mode (col. 5, lines 52-62) when said electric motor is actuated to drive said front output shaft while said rear output shaft is driven by said primary power source.

(claim 4) wherein said control system is operable to define an engine operating mode (col. 6, lines 5-22) when said electric motor is off such that said front driveline is not driven while said primary power source drives said rear driveline.

(claim 5) wherein said control system includes a controller 30 and sensors 28 for detecting operating characteristics of the vehicle, said controller operable for controlling independent actuation of said primary power source and said electric motor.

(claim 6) wherein said transfer case further includes a mode clutch 62 operably disposed between said rear and front output shafts and a clutch operator 104 adapted to engage said mode clutch for coupling said front output shaft for rotation with said rear output shaft.

Art Unit: 3681

(claim 7) Bowen et al'608 shows a transfer case 20 for use in a motor vehicle having a powertrain 12 and front 36 and rear 46 drivelines, comprising:

a rear output shaft 50 adapted to deliver drive torque from the powertrain to the rear driveline;

a front output shaft 40 adapted for connection to the front driveline;

a reduction unit 56 having an input member 82 driving an output member 88, said output member connected to said front output shaft;

an electric motor 22 driving said input member of said reduction unit and operable for delivering drive torque to the front driveline; and

a control system (26, 28, 30) for controlling actuation of said electric motor to define an electric operating mode (col. 5, lines 28-50 and col. 6. lines 16-22) wherein said electric motor delivers drive torque to the front driveline while no drive torque is delivered from the powertrain to the rear driveline.

(claim 9) see claim 3 above.

(claim 10) see claim 5 above.

(claim 11) see claim 6 above.

(claim 14) Bowen et al'608 shows a hybrid motor vehicle, comprising:

a powertrain including an internal combustion engine 12 and a transmission 14;

a rear driveline including a rear differential 46 connecting a pair of rear wheels 42;

a front driveline including a front differential 36 connecting a pair of front wheels 32;

a transfer case 20 including a rear output shaft 50 operable for transferring power from

Art Unit: 3681

said powertrain to said rear differential, a front output shaft 40 connected to said front differential, an electric motor 22 having a motor output shaft (shaft between motor 22 and sun 112) and a gearset 56 interconnecting said motor output shaft to said front output shaft; and a control system (26, 28, 30) for controlling actuation of said electric motor for transferring power to said front output shaft, and wherein an electric operating mode (col. 5, lines 28-50 and col. 6. lines 16-22) is established when said electric motor is actuated for driving said front output shaft while no power is transferred from said powertrain to said rear output shaft.

(claim 16) see claim 3 above.

(claim 17) see claim 6 above.

#### ***Allowable Subject Matter***

5. Claims 12, 13 and 18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
6. Claims 19, 21-24 and 26-34 are allowed

#### ***Response to Arguments***

Applicant's arguments, filed 8/19/05, with respect to the rejection(s) of claim(s) under Bowen'128 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Bowen et al' 608 (see above).

*Conclusion*

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

*Communication*

8. Submission of your response by facsimile transmission is encouraged. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9326 for regular communications and (703) 872-9327 for After Final communications. Recognizing the fact that reducing cycle time in the processing and examination of patent applications will effectively increase a patent's term, it is to your benefit to submit responses by facsimile transmission whenever permissible. Such submission will place the response directly in our examining group's hands and will eliminate Post Office processing and delivery time as well as the PTO's mail room processing and delivery time. For a complete list of correspondence not permitted by facsimile transmission, see M.P.E.P. 502.01. In general, most responses and/or amendments not requiring a fee, as well as those requiring a fee but charging such fee to a deposit account, can be submitted by facsimile transmission. Responses requiring a fee which applicant is paying by check should not be submitting by facsimile transmission separately from the check. Responses submitted by facsimile transmission should include a Certificate of Transmission (M.P.E.P. 512). The following is an example of the format the certification might take:

I hereby certify that this correspondence is being facsimile transmitted to  
the Patent and Trademark Office on \_\_\_\_\_

Art Unit: 3681

(Date)

Typed or printed name of person signing this certificate:

\_\_\_\_\_

(Signature)

If your response is submitted by facsimile transmission, you are hereby reminded that the original should be retained as evidence of authenticity (37 CFR 1.4 and M.P.E.P. 502.02). Please do not separately mail the original or another copy unless required by the Patent and Trademark Office. Submission of the original response or a follow-up copy of the response after your response has been transmitted by facsimile will only cause further unnecessary delays in the processing of your application; duplicate responses where fees are charged to a deposit account may result in those fees being charged twice.

Any inquiry concerning this communication or earlier communication from the examiner should be directed to Examiner Ho whose telephone number is (703) 305-0738. The examiner can normally be reached on Monday-Friday from 7:30 A.M. to 5:00 P.M. Eastern Standard Time. If attempts to reach the examiner by phone are unsuccessful, the examiner's supervisor, Mr. Charles Marmor, can be reached at (703) 308-0830. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-2168.

HDH  
(703) 305-0738  
September 1, 2005

HA HO  
**HA HO**  
**PRIMARY EXAMINER**  
Art Unit 3681 9/01/05